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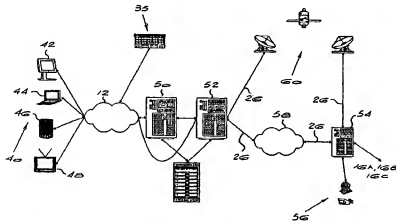
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(54) Title: GAMING SYSTEM AND METHOD



(57) Abstract: A gaming system (10) comprises a communications network (12) for allowing a plurality of users (14A, 14B, 14C, 14D) to access and place a bet or wager on one of a plurality of remote events (16A, 16B, 16C) and/or sub-event. The users (14A, 14B, 14C, 14D) are able to view the events (16A, 16B, 16C) and sub-events as a live, substantially real time image (26), at a gaming console, with the image (26) comprising video and/or audio data. The system (10) comprises an interface (20) with which the users (14A, 14B, 14C, 14D) interact. The interface (20) includes a Virtual Gaming Environment (VGE) component (22), which in turn is coupled to a plurality of rule configuration components (24A, 24B, 24C). The rule configuration components (24A, 24B, 24C) contain rules specific to the events (16A, 16B, 16C) respectively, as well as sub-rules relating to the sub-events of the events (16A, 16B, 16C). The rule components (24A, 24B, 24C), and in particular the sub-rules of sub-events, can be configured, amended and defined by the users (14A, 14B, 14C) or by an independent sponsor or an administrator of the system (10).

GAMING SYSTEM AND METHOD

BACKGROUND TO THE INVENTION

This invention relates to a gaming system and method, and in particular to an internet-based gambling system and method for allowing a user to place a bet or wager on the outcome of an event.

Internet-based gambling, or online gambling, is known. Typically, an Internet web site allows a user to place a bet on, for example, a game of roulette, with the web site generating an image of the roulette game. However, there is no real physical roulette table. The Internet web site merely generates an image of the event as well as an event outcome based upon a pre-defined set of rules.

One of the problems with this system is that a user may be concerned that because the event is computer generated, it may be possible to manipulate the outcome of the event. In addition, a user has no way of actually viewing and betting on the outcome of an event in real-time, from a remote location, which would provide a greater sense of participation and excitement for the user. A further, and more significant problem, is that the user is limited to the particular set of rules governing the event. Thus, there is no flexibility for allowing a user to define a set of sub-rules that extend beyond the rules that traditionally cover a particular game or event.

There are various inventions that attempt to address the above noted problems. For example, US patent no. 5,762,552 to Vuong *et al.*, discloses a gaming system that allows a plurality of users to place wagers on a real-time game of chance being conducted in a casino. Although this invention provides for a video representation of the game to be transmitted to the user, the user is ultimately bound to the exact, traditional rules governing that game. In addition, this reference appears to be limited to gambling on

games that are casino based. This is restrictive, in that a user is casino-bound, with the result that the user is unable to gamble on an event that is external to the casino.

A further prior art reference is US patent no. 5,800,268 to Molnick, which provides a method of participating in a live casino game from a remote location. As with the Vuong reference described above, this invention provides for a live image of the game being played to be transmitted to the user. However, this invention is relatively limited in its application in that it appears as if every user's move has to be physically carried out on the actual physical game. Consequently, the number of user's that can participate in this game is limited to the number of physically empty spaces in the casino.

Thus, it would be desirable to allow a plurality of users to bet on an event and/or a user-defined sub-event whilst viewing the actual event and/or sub-event in real-time, without any interaction between the user and the actual event.

SUMMARY OF THE INVENTION

According to a first aspect of the invention there is provided a gaming system for allowing a plurality of users to place a wager on at least one of a plurality of remote events and/or sub-events, wherein each event comprises at least one sub-event, with the outcome of the event being determined by a pre-defined set of rules and the outcome of the sub-event being determined by a set of sub-rules, the system comprising:

control means;

a first communications network for allowing the control means to communicate with the plurality of users;

a second communications network for allowing the control means to receive a live image of the plurality of events and/or sub-events;

funds acceptance means for accepting funds from the user;

an event selecting means for allowing the user to select an event on which he or she wishes to place a bet;

sub-event defining means for allowing the sub-rules governing the sub-event on which the user wishes to place a bet to be defined;

odds generating means for generating odds for the selected event and/or sub-event;

wager placing means for allowing the user to place a wager on the event and/or sub-event; and

outcome determining means for determining the outcome of the sub-event and/or sub-event and for communicating the outcome to the control means,

wherein the control means is arranged to notify the user of whether he or she has won the wager or not.

Preferably, the first communications network is bi-directional for allowing user data including the placed wager and outcome of the event and/or sub-event, to be sent received from, and sent to, the user.

Typically, the second communications network is unidirectional for allowing data only to be sent from the remote event to the control means.

Advantageously, the gaming system includes game display means for allowing the user to view, substantially in real time, the sub-event as a live data stream.

Conveniently, the game display means is arranged to display a graphical representation of the sub-event to facilitate the placing of wagers.

In one form of the invention, the event takes place at a remote casino, with the event being selected from a group comprising roulette, craps and blackjack. Alternatively, the event takes place at a remote sporting venue and the event is selected from a group comprising a game of soccer, a boxing match and horse racing.

Preferably, the gaming system includes a plurality of rule configuration components that contain rules specific to the events and sub-rules relating to the sub-events.

According to a second aspect of the invention there is provided a gaming method for allowing a plurality of users to place a wager on at least one of a plurality of remote events and/or sub-events, wherein each event comprises at least one sub-event, with the outcome of the event being determined by a pre-defined set of rules and the outcome of the sub-event being determined by a set of sub-rules, the method comprising the steps of:

transmitting from a remote location a live image of the plurality of events and/or sub-events;

selecting an event and/or a sub-event on which the user wishes to place a bet;

generating odds for the selected event and/or sub-event;

accepting a wager from the user;

determining the outcome of the event and/or sub-event; and

notifying the user as to whether he or she has won the wager or not.

Preferably, the method includes the step of displaying the sub-event as a live data stream, substantially in real time.

Advantageously, the method includes the step of displaying a graphical representation of the sub-event to facilitate the placing of wagers.

BRIEF DESCRIPTION OF THE DRAWINGS

- Figure 1** shows a highly schematic block diagram of the gaming system according to the invention;
- Figure 2** shows a block diagram of the gaming system according to a first embodiment of the invention;
- Figure 3** shows a block diagram of the gaming system according to a second embodiment of the invention;
- Figure 4** shows the various devices that could be used to implement the gaming system of the present invention; and
- Figure 5** shows an example of a user interface of the gaming system.

DESCRIPTION OF THE EMBODIMENTS

Referring first to Figure 1, a gaming system 10 of the invention comprises a bi-directional communications network or link 12 for allowing a plurality of users 14A, 14B, 14C and 14D to access and place a bet or wager on one of a plurality of events 16A, 16B and 16C. Clearly, any number of users may access the gaming system 10, with the link 12 taking on any one of several forms. Users 14A and 14B, for example, are shown accessing the system 10 by means of an Internet connection 18, with users 14C and 14D accessing the system 10 via other means, such as, for example, a satellite

connection or via a telephone or cellular network, or a public or private communications network.

The term "event" is meant to include, but not be limited to, any type of casino game, such as roulette, craps and blackjack, as well as a sporting event, such as a game of soccer, a boxing match and horse racing. In fact, the gaming system 10 can be used to allow a user 14A, 14B, 14C and 14D to bet on the outcome of any event. Significantly, the term "event" is also used to cover a sub-event i.e. a part or portion of a main event. As an example, an event could be a boxing match, but a sub-event could be the score after Round 1 of the same boxing match.

The system 10 comprises an interface 20 with which the users 14A, 14B, 14C and 14D interact, the interface 20 including a Virtual Gaming Environment (VGE) component 22, which in turn is coupled to a plurality of rule configuration components 24A, 24B and 24C. The rule configuration components 24A, 24B and 24C contain rules specific to the events 16A, 16B and 16C respectively, as well as sub-rules relating to sub-events of the events 16A, 16B and 16C.

Significantly, the rule components 24A, 24B and 24C, and in particular the sub-rules of sub-events, can be configured, amended and defined by the users 14A, 14B and 14C or by an independent sponsor or an administrator of the system.

In one embodiment, the sub-rules are left to the discretion of the users of the system, wherein each user defines his or her own criteria outcome for a certain sub-event, and places a wager on that user-specified outcome. Other users may also decide to bet on the user-specified outcome. In this case, the odds and payouts are determined by whether the event and/or sub-event occurs or not, with the amount wagered by the users being pooled for that specific event and/or sub-event. For example, if the event were a game of soccer being viewed by the users, a user could define a sub-rule such as the outcome of who wins the match e.g. whether team X

wins, loses, or whether there is a draw. This rule is based on the granularity of the event being large. Another example could be the user defining a sub-rule that specifies that soccer player Y will be the first player to kick the ball. Although this is an extremely narrow example, a primary advantage of this invention is its flexibility in allowing a user to bet on any particular user-defined sub-event. There is no limit to the rules which may be created, so long as they are verifiable by the users watching the video representation of the event, as well as someone, or something, in the system, confirming the outcome of the event for that rule.

In certain circumstances, it may not be appropriate for users to define the sub-rules for the sub-events, but rather an external sponsor. For example, the sponsor of a boxing event, could define sub-rules such as who wins the match, in which round a fighter is knocked out, who is ahead on points after each round, and so forth. The sponsor could typically put an amount of money into the pool as an incentive to win, and also establish odds, such as two-to-one, and so forth, to create incentive for users to bet on the sub-event.

In another embodiment, a system administrator could define the sub-rules. For example, in a casino, there may be a variety of casino-type games being videoed and streamed to the users, and in these cases it may be appropriate for the sub-rules of a sub-event to be identical to the rules of the event. Roulette is an example where the rules could be the same for the users of the system as they are for the players physically sitting around the table. The users, of course, would be playing with each other, or with the odds at the casino, and not interacting with the players at the table, but watching them. Clearly, the users are not limited to having to follow the same rules that are being followed by the players that are physically at the table, as it may also be appropriate to allow users, for example, to bet on which player will win a roulette game.

The granularity of rules and betting may also be very flexible, to allow for betting on a specific highly granular sub-event, such as the card a dealer

shows in round three of a game of black jack, or if boxer A scores more points than boxer B in round 4. Clearly, broader sub-events could also be defined, such as which player in the casino will have the biggest winnings on the night, or whether it rains on boxing night or not. The granularity depends on the ability of the casino, race-course, or whoever the owner and administrator of the gambling system is, to verify the outcome of the events and/or sub-events.

The actual events 16A, 16B and 16C are transmitted as live images 26, in real time, to the users 14A, 14B, 14C and 14D, with the images comprising video and/or audio data of the live event.

Turning now to Figure 2, the gaming system 10 includes a user interface 28 that comprises a user console 30, a video viewing screen 32, for allowing the user to view the live images 26, and a gaming console 34. The user console 30 allows a user to:

1. Access the gaming system 10;
2. Create his or her demographic and credit profiles. Typically, once a user has connected to the gaming system, he or she will be able to create a personal account on the system, load banking and/or credit details, as well as other demographic details such as address, passwords, limits of credit which the user may require, and so forth.
3. Set gambling amount limits; and
4. Check, verify and authorise credit facilities, by, for example, linking to a global e-commerce credit settlement and processing service provider 35.

The above steps must be done and confirmed prior to the user being able to bet on events, but they are configurable, so that they can be modified and updated on an ad-hoc basis thereafter.

The gaming console 34 allows the user to place one or more bets or wagers on one of the events 16A, 16B and 16C and/or sub-events. The gaming console 34 interacts with the VGE 22, and with the rule configuration components 24A, 24B and 24C for the particular event and/or sub-event. The gaming console 34 may, in addition, include a graphical representation of the game in addition to the live, real time images, to facilitate the placing of bets. For example, if a user is betting on a game of roulette, a graphical roulette table may be provided for allowing the outcome of the roulette wheel to be seen, in addition to the live image of the actual event.

In the preferred embodiment, the user will interact with the gaming system 10 via the Internet, thus facilitating access to the gaming system from any location that is remote from where the actual event is occurring. In addition, the preferred embodiment would typically make use of a Certificate Server (not shown) for providing security in the communication line through encryption, as is common in the art. Typically, "HTTPS", which is a secure encrypted HTTP link, would be used to implement this encryption. Clearly, the communication itself is not limited to this example, but may include a variety of different communication protocols and specifications, including, PHP, ASP, SOAP, all XML based derivatives, and even COM, DCOM or COM+.

In Figure 2, the gaming system makes use of a "thick" client, in that the playing console 30 and gaming console 34 are downloaded from the Internet and installed on the user's side. These components may be ActiveX controls, Java applets, VBScript, JavaScript, or any other type of browser based thick client application. In addition the video and audio live images 26 may be provided to a local media player, such as Windows Media Player, RealAudio Player, or any other similar media player.

The user connects to a gaming web site 36, which is run on a gaming web server that is located at the event's side. The gaming web site 36 is responsible for identifying a session from a user, and sending down the

relevant graphical representation for the gaming console 34, if applicable. A session is a specific connection between the user and the gaming web site 36, which lasts at long as the user is connected to the site. Session maintenance is managed by the web server. The web site 36 is also responsible for transmitting the live images 26 to the user interface 28.

Alternatively, it is envisaged that the user need not necessarily require a browser, with rather a client-server model, which a forms-based front end, being installed on the user's device, and using one of the above communication protocols to communicate with the gaming web site 36.

Game unit plug-ins 38A, 38B and 38C are either pre-installed or downloaded from the gaming web site 36. These plug-ins 38A, 38B and 38C are used to capture and display the graphics for the playing console 30, the graphics being specific to the event on which the user wishes to place a wager. Plug-ins 38A, 38B and 38C will graphically represent the rules and sub-rules encapsulated and defined in plug-in 24A, 24B and 24C respectively.

Figure 3 shows another preferred embodiment of the gaming system 10 in which components similar to those described above with reference to Figure 2 have been identified with similar reference numerals. In this version of the invention, the playing console 30, the gaming console 34, and its associated game unit plug-ins 38A, 38B and 38C, and the live images are hosted on the gaming web site 36. This advantageously allows for different types of user devices 40, such as, and with reference to Figure 4, a traditional computer or workstation 42, a handheld device 44 such as a consumer electronic device, Web terminal, Internet access appliance, mobile data acquisition handheld, or embedded communication device, operated by an embedded operating system like Microsoft Window CE, a PDA personal assistant 46 and a web TV 48. The device 40 may also take the form of a cellular telephone, and in particular a WAP-enabled telephone for allowing the user to access the gaming web site 36, which is hosted on a web server 50 and/or a gaming server 52.

Figure 4, which shows an embodiment of the technology required for the system from a hardware perspective, shows two different ways of communicating between the event 16A, 16B and 16C and the gaming server 52. In this case, a remote gaming server 54 is deployed at the site of the event, the remote gaming server 54 being used to capture the video and audio data by means of a plurality of peripheral video recording devices 56. Once captured, the data is then transmitted to the gaming server 52 either via an Internet connection 58 or via a satellite link 60.

Referring back to Figures 2 and 3, the gaming system 10 further comprises a status controller 62, which controls the operation of the system 10 and processes commands and instructions from the user. The status controller 62 is typically located on the same physical machine hosting the gaming web site 36 i.e. gaming server 52. The status controller 62 communicates with a rules engine 64, which receives the rule configuration components 24A, 24B and 24C. As mentioned above, these components store the rules and sub-rules about the various events 16A, 16B and 16C, and sub-events, on which the user can place a bet or wager.

The gaming rules engine 64 is responsible for taking the user's bets and user profile if appropriate (personal preferences, credit limits, bank account details, and the like) into account, as well as the event outcome information, and applying these to rules about how the event and sub-event works. This is for verification that the user has a valid bet (sufficient credit, valid rule) and that the event and/or sub-event outcome was valid and completed. When the event and/or sub-event occurs after all betting is complete, the rules engine 64 calculates the odds of the event and/or sub-event, and the winnings and losses for each user betting on the outcome of the event and sub-event, and presents the information to the user via the status controller 62. The rules engine 64 is flexible enough to cater for a number of different game types, such as casino based games, through to sports betting such as boxing or soccer, where progressive betting is allowed, and odds may change during the duration of the event.

Progressive betting is useful when the event is not a single discrete indivisible event, but may be spread over time. In this case, it may be desirable to allow betting to continue during the event execution itself. For example, the rule of who wins or loses a boxing match, may allow for additional betting and changing of odds after each round of the match.

In another example, the event may be the result of who wins a marathon race. In this case, there are no discrete units within the event to re-evaluate bets and odds, and users may bet continuously until the end of the event, with the odds changing in real-time during the event execution.

In other cases, such as betting on the outcome of a horse-race, it is not appropriate to allow for progressive betting, rather to freeze all bets prior to the start of the race. The rule configuration components 24A, 24B and 24C are sufficiently flexible to allow for defining such parameters for the event and sub-events.

The status controller 62 is also responsible for auditing and recording each detail of every game unit into a historical log of all system events that can be tracked, monitored and reviewed.

The system 10 includes a user database 65 that houses all the user's statistics, preferences, credit and banking details, and the like, as well as his user name and password for allowing access to the system 10. The user database 65 also keeps track of the winnings and losses for that user, and stores and retrieves this information, as with the other information, as required by the status controller 62.

In Figures 2 and 3, an image stream transmission controller 66 manages the transmission of the video and audio streaming sources, obtained via the devices 56, to the user. The video and audio data stream may be transmitted either directly to the user's device, indicated by stream feed 68, or via the gaming web site 36 itself, as indicated by stream fee 70. The nature of the live image stream 26 depends on the type of event being

transmitted. For example, the stream 26 could be continuous or it could be produced in burst fashion, depending on the rules of the event.

In the case of a marathon race event, or a boxing match event, the entire event will be transmitted, preferably without gaps and breaks in transmission. In the case of betting on horse racing, it may be appropriate to only transmit the actual races as they occur, and not the idle time between races. This is flexible and configurable by the system administrators as appropriate. What is essential, however, is that the critical part of the event which reflects a specific outcome which has bets related to it, must be transmitted so that the users can visually verify the outcome of the event, or sub-event.

In order to know when to start and stop transmission, the transmission controller 66 communicates with an outcome interface 72, via a communications link 74. The transmission controller 66 and the outcome interface 72 are typically hosted on the remote gaming server 54. The outcome interface 72 is responsible for synchronising the gaming system 10 and for keeping track of the events and sub-events. This it does by informing the status controller 62:

1. When betting starts for the event (by sending a start betting signal);
2. When betting stops for the event, unless progressive betting is allowed, in which case progressive betting start and stop events are generated (by sending a stop betting signal);
3. When the event has started;
4. When the event has stopped; and
5. The outcome of the event itself.

As mentioned, the outcome interface 72 is used to synchronise all the components of the system. This is because all betting is time critical to the actual timing of the event itself. It is important that start and stop signals as well as outcomes are done exactly at the right time to ensure that betting is valid. In some embodiments of the system, where the event is over a protracted period of time, for example, betting on the outcome of a lengthy event such as the Tour de France cycling event, where the rules dictate the outcome being the winner of the event, then synchronization is less of an issue, especially if betting stops before the race begins. If the events are individual games of roulette being played at a casino, then synchronisation is critical, as the system needs to know exactly upon which event all players are betting, and the outcomes of each event as they occur, even if potentially hundreds of events occur per hour, or per minute.

The level of efficiency of the synchronization will be related to the ability of the outcome interface 72 to communicate even states such as start betting, stop betting, start event, stop event, and outcome, to the status controller 62.

The outcome interface 72 includes an electronic interface, for allowing remote electronic event notification systems to connect to it, by means of link 76. For example, in a casino where a game management system already exists, for tracking the events and outcomes of casino games, the management system can interface directly with the outcome interface 72. For other type of events, this electronic interface may not exist, and must either be provided by the event owners or a manual interface will be provided in order to manually capture the changing status of the event. In this embodiment, there would need to be a physical person watching the event, either at the place of the event, or remotely from the event, who would manually record and capture the status changes into an interface. Typically this would be through a windowed or internet browser environment on a PC or workstation.

The e-commerce service provider 35 is responsible for verifying the bank or credit details of the user, unless another credit facility mechanism is provided, such as direct deposits and faxed confirmations. The provider 35 is also arranged to issue debits and credits to the user's credit card or bank account, whichever is appropriate. These types of systems are commonly available.

Figure 5 shows two different styles of presenting the information at the user interface. This may either be in a consolidated single browser interface 78 or it may be split into two or more browser windows 80. The latter arrangement would be particularly advantageous in cases in which video and audio feeds are sourced from a plurality of remote locations.

A game event is made up of the betting phase, and the event or sub-event occurrence, whether it be the spinning of the wheel of roulette, the outcome of a game of blackjack, a horse racing event, or even a boxing match.

Should the user not have provided credit card or banking details into the user database, the user would have pre-deposited money into the gaming systems' bank account and faxed through the deposit details. In this embodiment of the system, the user has a credit limit with the gaming system. In this case, when the user completes gambling, the status controller 62 will debit the net effect of the gaming session (one or more gaming units played after each other without logging of the system) from the user's pool of money, of which a record is kept. The user will typically only be able to bet until his credit limit is eroded to zero, unless the gambling establishment has other mechanisms, which are catered for if appropriate.

In another embodiment of the rules of this game, the rules may require that the internet users bet on a graphical representation of the roulette table through the Gaming Console, but the winnings and losses come out of the actual pool of bets placed on that game unit only. In this case, after perhaps taking a clipping fee on the game unit, the earnings are paid out of

the pool, and the system no longer is merely an extension of the existing casino, and the casino does not need to underwrite the risk of the game units.

In the circumstance where the user is allowed to define and customise rules for the event, the gaming console 38, will be structured in such a way that the user can define events and sub-events from the gaming console by using parameters and filters and options which will enable the user to define a sub-event. It is also possible, that the user can define a free-text rule which other users can see and evaluate themselves as to whether they wish to bet or not on that rule or sub-rule. In this way irrespective of the type of rule on the event, or sub-rule on the sub-event, the users themselves by choosing whether to participate and bet on the outcome, will automatically be determined by the system according to the pool of bets, and any additional sponsorship bet that may be placed by a sponsor.

In other circumstances, where the event is a predefined game, like roulette, or craps, the user will not have a customizable event/rule template to create new betting scenarios within the event, but will rather just be able to see a graphical image of the type of event game through the gaming console 38, with, for example, a picture of a roulette table, with forms and capture fields for capturing betting information. In addition, the video display of the event will be presented with the gaming console 38 for verification and confirmation of event outcomes. In this case, the rules captured in the rule engine in the Plug-ins 24, will be done in advance by the administrators of the system. The rule engine interface may be customizable to cater for any event, or may require specific development and programming to cater for more complex events.

The present invention thus provides a Virtual Gambling Environment (VGE) for allowing a plurality of users, punters or players to bet or wager, remotely via a suitable communications network, on the outcome of an event and, in particular, on a sub-event. The event is transmitted as a live, real time event for allowing a user to visually the outcome of the event. The VGE is

unique in that the users will be betting on the outcome of the event and/or sub-event, and will not interact with the event and/or sub-event. In particular, the sub-rules governing the sub-event is determined and controlled by the VGE.

The primary function of the VGE is to separate the user from the event, with the user typically betting on the outcome of an event or a sub-event, governed by the sub-rules, with the user having no control over the actual event or game being presented. Thus, the betting rules and settlement is controlled within the VGE and also has no direct impact on the event or gamblers gambling within the actual event.

CLAIMS

1. A gaming system for allowing a plurality of users to place a wager on at least one of a plurality of remote events and/or sub-events, wherein each event comprises at least one sub-event, with the outcome of the event being determined by a pre-defined set of rules and the outcome of the sub-event being determined by a set of sub-rules, the system comprising:

control means;

a first communications network for allowing the control means to communicate with the plurality of users;

a second communications network for allowing the control means to receive a live image of the plurality of events and/or sub-events;

funds acceptance means for accepting funds from the user;

an event selecting means for allowing the user to select an event on which he or she wishes to place a bet;

sub-event defining means for allowing the sub-rules governing the sub-event on which the user wishes to place a bet to be defined;

odds generating means for generating odds for the selected event and/or sub-event;

wager placing means for allowing the user to place a wager on the event and/or sub-event; and

outcome determining means for determining the outcome of the sub-event and/or sub-event and for communicating the outcome to the control means,

wherein the control means is arranged to notify the user of whether he or she has won the wager or not.

2. A gaming system according to claim 1 wherein the first communications network is bi-directional for allowing user data, including the placed wager and outcome of the event and/or sub-event, to be sent received from, and sent to, the user.
3. A gaming system according to either one of the preceding claims wherein the second communications network is unidirectional for allowing data only to be sent from the remote event to the control means.
4. A gaming system according to any one of the preceding claims wherein the user interacts with the control means via a gaming console, the gaming console including the wager placing means.
5. A gaming system according to claim 4 wherein the gaming console includes game display means for allowing the user to view, substantially in real time, the event and/or sub-event as a live data stream.
6. A gaming system according to claim 5 wherein the game display means is arranged to display a graphical representation of the event and/or sub-event to facilitate the placing of wagers.
7. A gaming system according to any one of the preceding claims wherein the plurality of users are remote from each other.

8. A gaming system according to claim 7 wherein each user can view the sub-rules defined by other users.
9. A gaming system according to claim 8 wherein each user can place a wager on a sub-event specified by another user's sub-rules, with the amount wagered by the users being pooled.
10. A gaming system according to any one of the preceding claims wherein the odds generating means generates odds before an event and/or sub-event commences.
11. A gaming system according to any one of claims 1 to 9 wherein the odds generating means generates odds during an event and/or sub-event to allow for progressive betting.
12. A gaming system according to any one of the preceding claims in which the sub-event defining means includes a plurality of rule configuration components that comprise the rules specific to the events and the sub-rules relating to the sub-events.
13. A gaming system according to any one of the preceding claims wherein the sub-rules are defined by the user.
14. A gaming system according to any one of claims 1 to 12 wherein the sub-rules are defined by a third party, the third party including an independent sponsor and an administrator of the gaming system.
15. A gaming system according to any one of the preceding claims wherein the event and/or sub-event takes place at a remote casino, with the event being selected from a group comprising roulette, craps and blackjack.
16. A gaming system according to any one of claims 1 to 14 wherein the event and/or sub-event takes place at a remote sporting venue,

with the event being selected from a group comprising a soccer game, a boxing match and horse racing.

17. A gaming method for allowing a plurality of users to place a wager on at least one of a plurality of remote events and/or sub-events, wherein each event comprises at least one sub-event, with the outcome of the event being determined by a pre-defined set of rules and the outcome of the sub-event being determined by a set of sub-rules, the method comprising the steps of:

transmitting from a remote location a live image of the plurality of events and/or sub-events;

selecting an event and/or a sub-event on which the user wishes to place a bet;

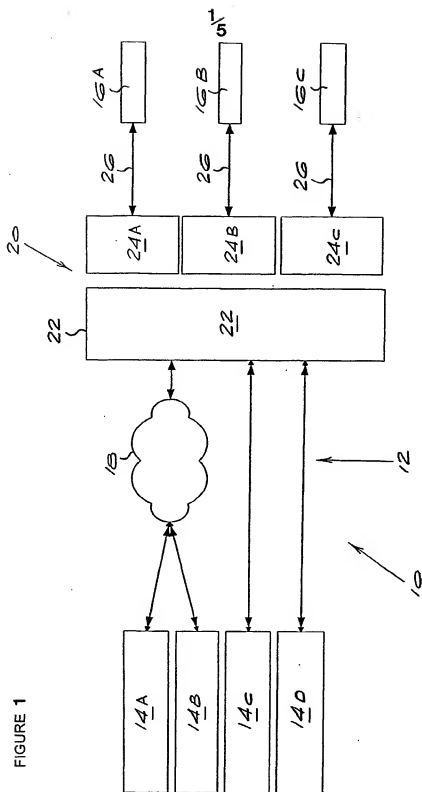
generating odds for the selected event and/or sub-event;

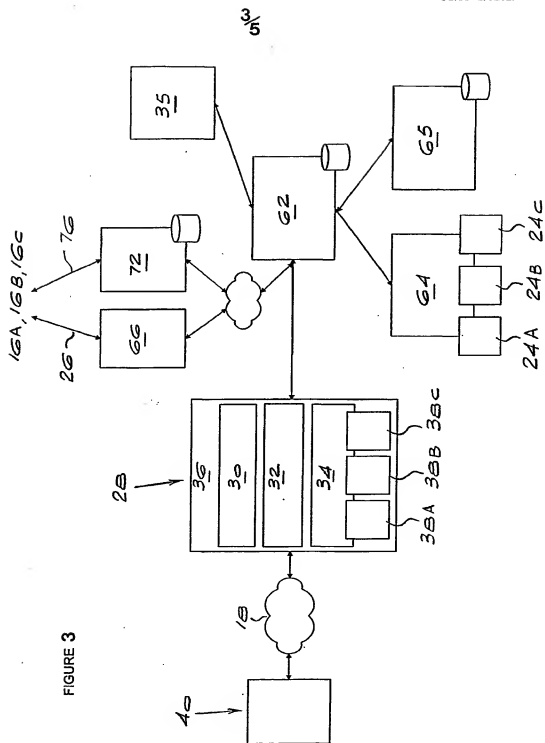
accepting a wager from the user;

determining the outcome of the event and/or sub-event; and

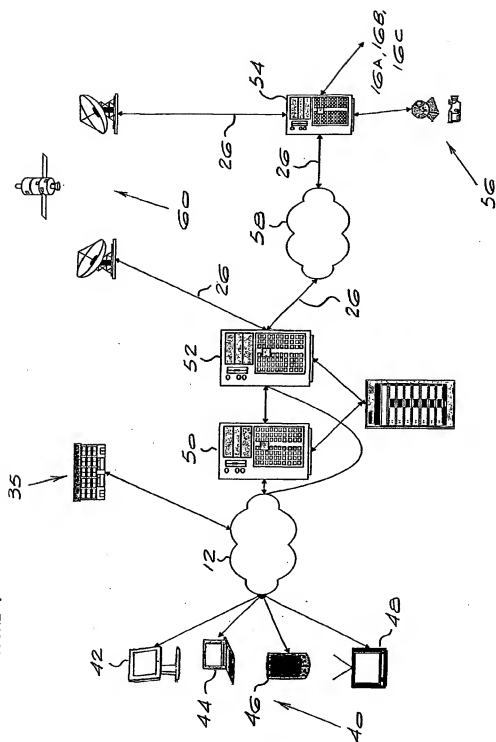
notifying the user as to whether he or she has won the wager or not.

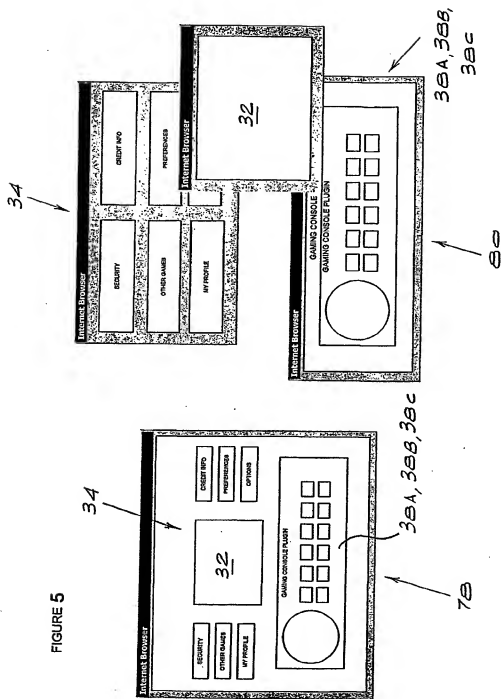
18. A method according to claim 17 which includes the step of displaying the event and/or sub-event as a live data stream, substantially in real time.
19. A method according to either one of the preceding claims 17 or 18 which includes the step of displaying a graphical representation of the sub-event to facilitate the placing of wagers.





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INTERNATIONAL SEARCH REPORT

International Application No.

PCT/IB 01/01029

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 607F17/32

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 607F A63F G06F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category* Citation of document, with indication, where appropriate, of the relevant passages

Relevant to claim No.

X	US 5 283 734 A (VON KOHORN) 1 February 1994 (1994-02-01) column 69, line 23 -column 70, line 54; figure 1	1-19
X	WO 01 03088 A (ODS TECHNOLOGIES) 11 January 2001 (2001-01-11)	1-5, 7, 10-12, 14, 16-18
Y	page 1, line 4 - line 14	6, 15, 19
A	page 8, line 1 -page 9, line 29 page 16, line 11 - line 34 page 17, line 22 -page 19, line 27 page 23, line 30 -page 25, line 23 page 26, line 18 -page 27, line 10 page 39, line 16 -page 40, line 8; figures 1, 7-12	8, 9, 13

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☒ Further documents are listed in the continuation of box C.☒ Patent family members are listed in annex.

* Special categories of cited documents:

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- "P" document published prior to the International filing date but later than the priority date claimed

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- "Z" document member of the same patent family

Date of the actual completion of the International search

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INTERNATIONAL SEARCH REPORT

International Application No.

PCT/IB 01/01029

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EP 0 620 688 A (NEWS DATACOM LTD.)	17-19
Y	19 October 1994 (1994-10-19) column 7, line 35 -column 10, line 27 column 11, line 42 -column 12, line 14; figures 1,2,4A,35 -----	6,15,19
X	WO 00 67215 A (STRONACH)	17-19
A	9 November 2000 (2000-11-09) page 6, line 15 -page 7, line 2; figures 1,2 -----	1-16

INTERNATIONAL SEARCH REPORT

attention on patent family members

International Application No

PCT/IB 01/01029

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 5283734 A	01-02-1994	US 4926255 A	15-05-1990
		US 4745468 A	17-05-1988
		US 5508731 A	16-04-1996
		US 2001003099 A1	07-06-2001
		US 5713795 A	03-02-1998
		US 5759101 A	02-06-1998
		US 5697844 A	16-12-1997
		US 5227874 A	13-07-1993
		US 5916024 A	29-06-1999
		US 5034807 A	23-07-1991
		US 5057915 A	15-10-1991
		US 5128752 A	07-07-1992
		US 4876592 A	24-10-1989
WO 0103088 A	11-01-2001	AU 5906100 A	22-01-2001
		WO 0103088 A1	11-01-2001
EP 620688 A	19-10-1994	IL 105432 A	28-10-1999
		AT 194256 T	15-07-2000
		AU 668462 B2	02-05-1996
		AU 5940694 A	20-10-1994
		AU 683800 B2	20-11-1997
		AU 6215596 A	23-01-1997
		CA 2120889 A1	17-10-1994
		DE 69425013 D1	03-08-2000
		DE 69425013 T2	01-03-2001
		EP 0620688 A2	19-10-1994
		ES 2150956 T3	16-12-2000
		IL 119874 A	09-05-1999
		JP 7059073 A	03-03-1995
		US 5539450 A	23-07-1996
		US 5592212 A	07-01-1997
WO 0067215 A	09-11-2000	AU 4278800 A	17-11-2000
		WO 0067215 A1	09-11-2000
		EP 1175665 A1	30-01-2002